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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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05/30/2006

Albert John Allen

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ELI LILLY & COMPANY

PATENT DIVISION

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EXAMINER

PIHONAK, SARAH

ART UNIT

PAPER NUMBER

4121

NOTIFICATION DATE

DELIVERY MODE

03/06/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patents@lilly.com

Office Action Summary	Application No. 10/581,015	Applicant(s) ALLEN ET AL.	
	Examiner SARAH PIHONAK	Art Unit 4121	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-5 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-5 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>5/30/06, 2/21/07</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

This application is a 371 (national stage application) of PCT/US04/38221, filed on 12/1/04, and claims priority to Provisional Application No. 60/529428, filed on 12/12/03.

1. Claims 1, and 3-5 are pending.
2. The instant application claims priority to Provisional Application No. 60/529428, filed on 12/12/03. The Provisional Application contains the inventive concepts as pertaining to the instant claims. Therefore, the priority date given to claims 1, and 3-5 is 12/12/03.
3. Claims 1, and 3-5 are rejected.

35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1 and 3 are rejected under 35 U.S.C. 102(e) as being unpatentable over US 7,345,096 patent. The US 7,345,096 patent claims priority to Provisional Application No. 60/418591, filed on 10/15/02.
6. Instant claim 1 cites a method of preventing hot flashes or vasomotor symptoms that comprises administration of a selection of compounds, one of which is atomoxetine.

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The US '096 patent also discloses the use of atomoxetine (column 6, lines 31-33) for treatment of vasomotor symptoms (Abstract).

7. Instant claim 3 cites the method as stated in instant claim 1, and that the compound for administration is atomoxetine hydrochloride. The US '096 patent teaches that pharmaceutically acceptable salts of atomoxetine may be used to treat vasomotor symptoms (column 3, lines 33-40). In particular, the US '096 patent teaches that the hydrochloride salt of the norepinephrine reuptake inhibitor is used (column 13, lines 37-51).

35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

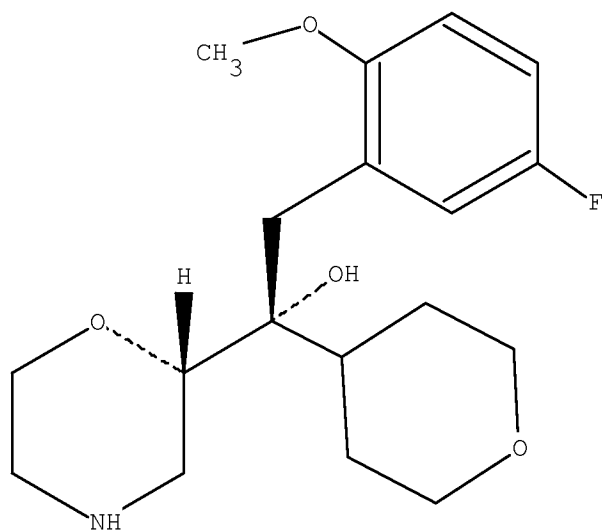
6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

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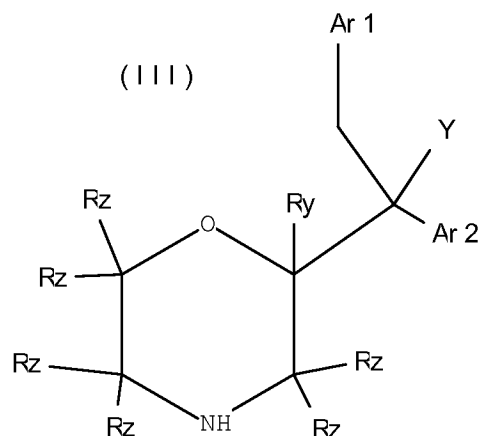
were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 1, 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 7,354,920 patent in view of US7,345,096 patent.

8. Instant claim 4 cites the method as stated in instant claim 1, and also, that the additional norepinephrine reuptake inhibitor of formula (II) is the compound shown below, or a pharmaceutically acceptable salt of:



The '920 patent teaches that morpholine derivatives of formula (III) below are useful as norepinephrine reuptake inhibitors (Abstract):



Where Y=OH or OR; Ry=H or C1-4 alkyl; Rz=H or C1-4 alkyl;

Ar1 and Ar2 = phenyl, or 5 to 6 membered heteroaryl rings, optionally substituted.

The compounds disclosed by the US '920 patent as general formula (III) have an aromatic substituent, known as Ar₂, that is adjacent to the morpholine ring. The compound of instant claim 4 include has a tetrahydropyranyl ring adjacent to the morpholine ring. Though this particular compound is not specifically taught by the '920 patent, the tetrahydropyranyl ring is the only structural feature that is different from the compounds taught by the US '920 patent. As such, the compound of instant claim 4 would be expected to have the same inherent properties as a norepinephrine reuptake inhibitor as the compounds disclosed in the US '920 patent. Therefore, the use of the compound of instant claim 4 as a norepinephrine reuptake inhibitor is obvious in view of the US '920 patent.

It is noted that In re Best (195 USPQ 430) and In re Fitzgerald (205 USPQ 594) discuss the support of rejections wherein the prior art discloses subject matter which there is reason to believe inherently includes functions that are newly cited or is identical to a product instantly claimed. In such a situation the burden is shifted to the

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applicants to "prove that subject matter shown to be in the prior art does not possess characteristic relied on" (205 USPQ 594, second column, first full paragraph).

9. Regarding instant claim 5, the use of the hydrochloride salt of the compound of instant claim 4 as a norepinephrine inhibitor is made obvious in view of the US '920 patent.

10. Regarding instant claim 4, the US '920 patent does not disclose the use of the disclosed compound to treat vasomotor symptoms.

11. Regarding instant claim 5, the US '920 patent does not disclose the use of the hydrochloride salt of the compound of instant claim 4 to be used to treat vasomotor symptoms.

12. The US '096 patent teaches that at least one norepinephrine reuptake inhibitor can be used to treat vasomotor symptoms (Abstract). As the '920 patent teaches that the compound of instant claim 4 functions to inhibit norepinephrine reuptake (Abstract), it would be prima facie obvious to use the compound of instant claim 4 to treat vasomotor symptoms.

13. Regarding instant claim 5, the US '096 patent teaches that norepinephrine reuptake inhibitors are useful for the treatment of vasomotor symptoms (Abstract). The US '920 patent teaches that pharmaceutically acceptable salts of instant claim 4 are norepinephrine reuptake inhibitors (column 1, lines 26-65). Therefore, it would be prima facie obvious to use the hydrochloride salt of the compound disclosed in instant claim 4 to treat vasomotor symptoms.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. Instant claim 1 cites a method of preventing or treating vasomotor symptoms which comprises administration of a selection of listed compounds. While many of the compounds are crossed over to indicate that they are no longer considered to be relevant to the claim, some structures are not. On page 8 of the listing of claims provided by the Applicants, there are several structures representative of formula (IF), as well as a structure (IH), on page 10. While the words "a compound of formula (IF)" are crossed out, not all of the structures are. It is therefore uncertain whether these structures are meant to be relevant to the instant claim. Additionally, after structure (I) of the instant claim, there is a description of the functional groups that may be present on structure (I), followed by the word "and". From this language, it is uncertain as to whether the method as cited in the instant claim comprises administration of more than one of the listed compounds. The language of instant claim 1 reads, "A method of preventing or treating hot flashes, or vasomotor symptoms, comprising administering to a patient in need thereof a therapeutically effective amount of a selective norepinephrine reuptake inhibitor selected from the group consisting of:" It has therefore been interpreted that the method comprises administration of only one of the listed

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compounds. However, the exact meaning is uncertain, and it is not definite whether more than one of the listed compounds is needed for the treatment of vasomotor symptoms.

Information Disclosure Statement

14. The information disclosure statement (IDS) submitted on 5/30/06 and 2/21/07 were filed. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SARAH PIHONAK whose telephone number is (571)270-7710. The examiner can normally be reached on Monday-Thursday 7:00 AM - 5:30 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Nolan can be reached on (571)272-0847. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

S.P.

/Patrick J. Nolan/
Supervisory Patent Examiner, Art Unit 4121